

standard of practice. The physician then assumes obligations that devolve upon the prescriber when a drug is used in a research situation. (In California, a physician who is providing nominal or actual medical authority for an addiction treatment program which employs drugs for investigational use, as defined here, should insist that the program seek approval from the Research Advisory Panel, Attorney General's Office, State of California.*)

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Laboratory Tests to Detect Drugs of Abuse

PHYSICIANS PLAY a central role in the treatment of significant drug abuse. In order to combat the manipulation and denial that drug abusing patients often employ, physicians must have access to sensitive, accurate and inexpensive laboratory tests with which continued drug use or compliance with treatment can be monitored. Such tests are now widely available at reasonable cost.

The most commonly used procedure is the screening of urine specimens with thin layer chromatography (TLC) and confirmation of positive or negative results by ancillary techniques. The TLC screening technique can detect opiates including the morphine metabolite of heroin, propoxyphene hydrochloride (Darvon®), glutethimide and amphetamines—all to the sensitivity of 1 to 2 µg per ml of urine.

To interpret the results properly, a physician must be aware of the metabolism of the major drugs of abuse. He must also assure himself that the specimen analyzed in fact came from the patient at the purported time of collection. The patient should be personally supervised during the collection of the urine specimen.

For a small additional fee, laboratories will analyze a urine specimen for metabolites of the benzodiazepines (diazepam [Valium®], chlordiazepoxide hydrochloride [Librium®], oxazepam [Serax®], clorazepate dipotassium [Tranxene®]) which appear to be rapidly becoming major drugs

of abuse. Sensitive and accurate tests for alcohol have been available for many years and physicians should remain aware that alcoholism frequently accompanies other forms of drug abuse. Alcoholics are often polydrug abusers and may ingest alcohol as a cover for other drugs. Physicians who treat drug abusers must be familiar with the effects of various blood and urine alcohol levels, and interactions of drugs with various alcohol levels.

Inexpensive screening methods are not available for the tricyclic antidepressants which have gained some popularity among drug abusers.

Monitoring the abuser of prescribed drugs presents a more formidable problem to a physician because a battery of tests may be necessary which would be prohibitively expensive to carry out on a regular basis. The more complex gas chromatographic procedures are required for the analysis of drugs such as ethchloruynol (Placidyl®) and methyprylon (Noludar®). However, in a case of medical drug abuse a physician can rely on his clinical judgment and information; that is, observed impairment and information from friends and relatives of the patient.

Laboratories which do these screening procedures in large volume will supply a physician with aids to interpretation as well as current information on patterns of drug abuse observed in their analyses.

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Nonmedical Detoxification of Alcoholic Patients

WITHDRAWAL FROM ALCOHOL without the use of sedative drugs in a home-like facility, supervised by carefully trained personnel (many of whom are recovered alcoholics), is called "the social treatment model." This approach provides a reassuring therapeutic environment where plans for continuing therapy are made, even during the initial phases, and consistently emphasized as an integral part of the treatment. Average length of stay is 3½ days at a cost of about \$30 a patient per day—a fraction of the cost of a general hospital stay of similar length.

The requirements for successful nonmedical detoxification are (1) an atmosphere of empathy

*Personal communication from Frederick H. Meyers, MD.